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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,345	12/06/2001	Jang Geun Oh	LT-0006	5261
34610	7590	01/27/2005	EXAMINER	
FLESHNER & KIM, LLP			ELAMIN, ABDELMONIEM I	
P.O. BOX 221200			ART UNIT	
CHANTILLY, VA 20153			PAPER NUMBER	
			2116	

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/003,345	Applicant(s) OH, JANG GEUN	
	Examiner A Elamin	Art Unit 2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3, 5-11 and 21-25 is/are allowed.
- 6) ☒ Claim(s) 12-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 12-13, 16-17 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Nguyen et al, US. Pat. No. 6,564,332.

3. Claims 12, 19, Nguyen teaches a clock generator generating a first clock signal [*system clock 301 of fig. 3*]; and

a clock adjustor [*clock synchronizer 311 of Fig. 3*] receiving the first clock signal and operating in a power source mode [*col. 4, lines 56-61*], said clock adjustor generating a second clock signal for the CPU [*Fig. 3, col. 6, lines 33-35*] and a third clock signal for the bridge controller [*col. 6, lines 29-31*], wherein the second and third clock signals are two distinct clock signals outputted by the clock adjustor and have frequencies that are independent of each other [*Fig. 3, col. 6, line 29-35*].

4. Claim 13, Nguyen teaches the bridge controller controls a clock speed of a bus for data communication among a plurality of peripheral devices of the apparatus [*see Fig. 1*].

5. Claims 16 and 17, Nguyen teaches a video processor ... [*Nguyen clock adjustor is capable of generating a fourth clock signal for a video processor, see col. 10, lines 28-31*]

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al, US. Pat. No. 6,564,332.

8. Claim 14, Nguyen fail to teach the clock adjustor is a PLL.

Official notice is taken that both the concept and the advantages of using a phase locked loop (PLL) for adjusting clock signals are old and well known in the art (*as admitted by Applicant, see Fig. 1 of the instant application*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nguyen to have a phase locked loop (PLL), because it locks to desired frequencies in a stable manner.

9. **Claims 15, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al, US. Pat. No. 6,564,332 in view of Bui, US. Pat. No. 6,763,478.**

10. Claims 15, 18 and 20, Nguyen teaches receiving the second clock signal for the CPU and adjusting the second clock signal based on a throttle signal sent by the power controller [*throttle signal of Fig. 3, col. 6, lines 40-49*].

However, Nguyen fails to teach adjusting the second clock signal based on one of AC power mode and a battery mode.

Bui teaches A computer system that is able to switch processor and bus frequencies, along with processor voltage, when the system is placed into AC from battery power mode, and when the system is placed into battery from AC power mode [*abstract, col. 3, line 60 thru col. 5, line 6*].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nguyen to include adjusting the second clock signal based on one of AC power mode and a battery mode, because it reduces CPU clock speed on a portable computer system and allowing battery life to be extended when operating on battery power, and increases CPU clock speed to make use of optimum performance when operating on AC power

Allowable Subject Matter

11. Claims 1-3, 5-11 and 21-25 are allowed.

Conclusion

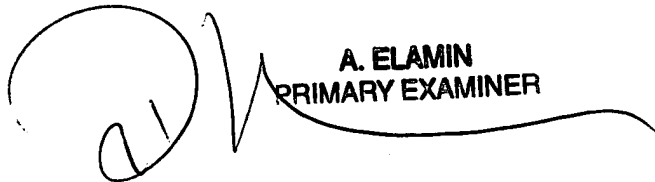
Any inquiry concerning this communication or earlier communications from the examiner should be directed to A Elamin whose telephone number is (571) 272-3674. The examiner can normally be reached on MON-FRI 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A Elamin
Primary Examiner
Art Unit 2116

January 25, 2005


A. ELAMIN
PRIMARY EXAMINER